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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,969	03/25/2004	Bernd Krueger	4052.001	7058

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EXAMINER

GIBSON, ROY DEAN

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,969

Applicant(s)

KRUEGER, BERND

Examiner

Roy D. Gibson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) 31-33 and 36 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35 is/are allowed.
- 6) ☒ Claim(s) 19-29 and 34 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/9/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's election without traverse of species A and claims 19-30 and 34-35 in the reply filed on 08 December 2006 is acknowledged.

Specification

The abstract of the disclosure is objected to because it contains legal language such as "comprises" and includes element numbers (typically not included in U.S. cases). Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 29 recites the limitation "the thermoelectric element" in line 3. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests claim 29 should depend from claim 28 to correct this. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19, 22–27 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Blumenfeld et al. (6,228,634). Blumenfeld et al. disclose a warming/chilling apparatus comprising:

a heating/cooling element (7); and

a heating device (electrical heating plate or foil heater inherently with a low heat capacity # 14) and a cooling device (fan # 17) for alternately heating and cooling the heating/cooling element to a high and a low temperature respectively, wherein the heating device and the cooling device are designed and arranged relative to each other in such a way that the change between the high and the low temperature is possible within three minutes, and wherein the temperature difference between the high and the low temperatures is at least 40 deg.C.

(Figures 3-5, col. 15, line 66-col. 17, line 45). In fact the drop in 40 deg. C is at the rate of 0.7 deg. /sec., therefore, a drop of 40 deg. C would be in 28 seconds.

Further to claim 24, the heating/cooling element (7) has a heating/cooling face including a surface of the heater (14 and Figure 4).

Further to claim 27, the thickness of the heating plate is that of a foil heater made by Minco Products, which from its data sheet attached reveals a thickness of about 0.25 mm or less than 0.5 mm as claimed (col. 16. lines 1-3).

Note the “pain treatment unit” recited in the preamble of claim 34 is merely intended use and the examiner maintains that the device of Blumenfeld et al. would be capable of

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heating/cooling a body portion of a patient (e.g., a finger) which would inherently treat pain.

Claims 19-25, 28, 29 and 34 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Crump (3,289,749). Crump discloses a refrigerated medical probe with a tip heated by a metal winding and a plate connected to the tip which is cooled on either side by a thermoelectric (TE) cooling device and further cooled by a circulating fluid. In use the probe is typically heated to 50 deg. F (10 deg. C) and rapidly cooled to well below freezing (0 deg. C) in 2-3 seconds (col. 2, lines 17-19 and col. 3, line 1-col. 4, line 53). The cooling rate would be at about 5 deg. C /sec. or 40 deg. C in about 8 sec. However, the examiner maintains that such a structure would be capable of heating and cooling the tip and the associated plate as claimed since Crump discloses a capability of the TE device to achieve a temperature difference of 145 deg. F (80 deg. C and col. 2, lines 21-24). In addition the device could be cooled with a fluid colder than 45 deg. F (5-6 deg. C) and inherently be able to cool the heating/cooling element within 30 sec.

Allowable Subject Matter

Claim 35 is allowed.

Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

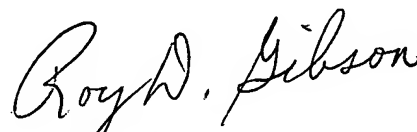
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Roy et al. (6,776,779) disclose a device for heating and cooling a fascia and support tissue for treating incontinence (Figure 19) with heated protrusions (106) in contact with tissue and adjacent cooled protrusions (110) in contact with tissue wherein the cooled protrusions and associated cold plate (108) in an alternative embodiment can be cooled by a thermoelectric device (col. 16, line 37-col. 17, line 7). But, the device of Roy et al. lacks a (heating/cooling element which is alternatively heated and cooled; Tretakov et al. (6,556,940) disclose a rapid heat block thermocycler which uses a thermoelectric module for both heating and cooling but is capable of a temperature change of 40 deg. C in 30 seconds; and Grant (5,653,741) disclose a heating and cooling pad to alleviate pain and swelling in a patient's body, but also uses a thermoelectric module for both heating and cooling.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy D. Gibson whose telephone number is 571-272-4767. The examiner can normally be reached on Tu-Th, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Roy D. Gibson". The signature is written in a cursive, flowing style.

Roy D. Gibson
Primary Examiner
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March 8, 2006